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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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11/21/00

EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED: 05/25/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
08/973,017

Applicant(s)

Leijon et al.

Examiner

Enad, Elvin

Group Art Unit  
2834

☒ Responsive to communication(s) filed on Mar 25, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-35, 37, and 39-50 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-21, 30-35, 37, and 39-50 is/are rejected.

☒ Claim(s) 22-29 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Application/Control Number: 08/973,017

Art Unit: 2834

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed March 25, 1998, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Objections***

2. Claims 2-34 are objected to because of the following informalities: These claims being dependent claims should begin the first sentence with ---The--- instead of "A". Appropriate correction is required.
- ✓ 3. Claims 22-29 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations set forth in the claims do not further limit the rotating electrical machine but instead define a structure outside the electrical machine.

Application/Control Number: 08/973,017

Art Unit: 2834

***Claim Rejections - 35 USC § 112***

4. Claims 1,2,4-6,8,13-15,18,20,21,34,40,43,46 and 48 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the preliminary amendment which deletes the phrase "[layers, each layer]" makes the limitation reciting the "at least one semiconducting comprising..." unclear.

In claim 2, use of the term "substantially" makes the term indefinite, for example, it is impossible to determine how what the range or how close "the coefficient of thermal expansion" should be in order to be substantially the same. A similar language is found in claim 8.

In regard to claim 4, reference to the "innermost semiconducting layer" is unclear, lacking proper antecedent basis.

In regard to claim 5, reference to the "equipotential surface" is lacking proper antecedent basis.

In regard to claim 6, reference to the "said at least one layer comprising" is unclear. The limitation needs to clearly state whether reference is made to the semiconducting layer or insulating layer. A similar language is found in claim 8.

In claim 13, the limitation pertaining to the slot having a number of cylindrical openings "running axially and radially outside each other" is unclear. In claim 14, reference to "the phases" of the stator winding is lacking proper antecedent basis. In addition, in claim 15, reference to "the Y-point" of the stator winding is lacking proper antecedent basis.

Application/Control Number: 08/973,017

Art Unit: 2834

In regard to claim 18, reference to the "high-voltage side" of the cable is lacking proper antecedent basis. In claim 20, references to "the yoke" and "the rotor" are lacking proper antecedent basis. Also, in claim 21, "the rotating part" is lacking proper antecedent basis.

In regard to claim 34, the limitation pertaining to the winding arrangement and "lacks auxiliary means" for control of the field is unclear, lacking positive limitation.

In claim 40, the limitation pertaining to the outer layer "having a conductivity sufficient to establish an equipotential surface around the conductor" is vague and indefinite. In regard to claim 43, the limitation pertaining to the layers being "substantially void free" is vague. Also, claims 46-48 are indefinite since they fail to describe the means to perform the respective functions.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 10, 12-14, 21, 31, 32, 34, 35, 37 and 39-44 are rejected under 35 U.S.C. § 102(b) as being fully anticipated by Elton et al. (USP 5,036,165).

Elton et al. disclose an electrical cable provided with an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with a cable conductor. In an alternate

Application/Control Number: 08/973,017

Art Unit: 2834

embodiment, Elton et al. disclose an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator having a predetermined reference potential.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-9,15-20,30,33 and 45-49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elton et al. (USP 5,036,165) in view of Nikitin et al. (USP 4,429,244).

Elton et al. disclose the claimed invention except for a teaching of having the cables (windings) consisting of strands and having the electrical conductors uninsulated.

Nikitin et al. teach having a stator for a generator comprising a housing accommodating a slotted magnetic core 2, a winding composed of two-series connected half windings 7, 8 one half winding being insulated and the other half uninsulated. The high-voltage elements 6 are placed in insulation sleeves 14 which have hollow projections on the internal surfaces and placed between the hollow projections is a thermosetting compound. The part of each insulation sleeve 14 has a cylindrical portion integral with a cone-shaped cable-type termination reinforced with current-carrying layers.

Application/Control Number: 08/973,017

Art Unit: 2834

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided used the teaching of having insulated and uninsulated electrical conductor strands as taught by Nikitin et al. to the device as disclosed by Elton et al. since such a modification according to column 1, lines 61-64 of Nikitin et al. would reduce the amount of insulation and the number of electrical connections required in the end windings.

9. In regard to forming the semiconducting layer with the same coefficient of thermal expansion as that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients since it was known in the art that the expansion rate of the two layers would be the same and this is desirable in order to prevent cracking of the insulation and wear between the two.

10. Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Elton et al. (USP 5,036,165) in view of Nikitin et al. (USP 4,429,244) and further in view of Olsson et al. (USP 4,109,098)

Elton et al. and Nikitin et al. disclose the claimed invention except for the cable having a metal screen and a sheath.

Olsson et al. teach that it is known to utilize a cable having metallic shield or screen 6 jacketed by a mantle 7, see figure 2.


Application/Control Number: 08/973,017

Art Unit: 2834

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided used the teaching of having a metallic screen on the cable as taught by Olsson et al. and to have modified the device of Elton et al. or Nikitin et al. since such a modification according to column 3, lines 53-60 of Olsson et al. would provide a ground having means to discharge the field currents.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619.
13. Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-1782. The fax phone number for this Group is (703) 305-3431 (32).

  
Elvin Enad  
Primary Examiner  
Art Unit 2834  
05.18.99